## IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) A device for tamponade of body cavities and for mechanical anchoring of a catheter having a shaft with an end, the device comprising:

a flexible tube segment having an inner wall and an outer wall that surround an interior space wherein said tube segment is inflatable to assume a torus geometry with said inner wall defining an internal area, and the internal area is configured without through-passing support bodies so that a displacement of tube wall material between said inner wall and said outer wall of said tube segment is possible as inflation proceeds, wherein said tube section segment is preformed in such a way that a tube portion that forms the inner wall of said tube segment after invagination is smaller in cross section and has a greater wall thickness than a tube portion forming the outer wall, and wherein said tube segment further comprises:

- a. two ends, which are fastened to a same closing element, configured so that a torus geometry is striven for as said inflatable tube segment is inflated and
- b. said closing element is a pipe nipple and said two ends of said tube segment are joined together fluid-tightly.
- 2. (Previously presented) The device according to claim 1, wherein at least said outer wall is thin-walled and elastically expandable.
- 3. (Previously presented) The device according to claim 1, wherein at least said outer wall of the tube segment has a wall thickness of a few microns.
- 4. (Previously presented) A device for tamponade of body cavities and for mechanical anchoring of a catheter, the device comprising:

a flexible tube segment having an inner wall and an outer wall that surround an interior space wherein said tube segment is inflatable to assume a torus geometry with said inner wall defining an internal area, and the internal area is configured without through-passing support bodies so that a displacement of tube wall material between said inner wall and said outer wall of said tube segment is possible as inflation proceeds, wherein said tube segment consists of a transparent material and further comprises:

- a. two ends, which are fastened to a same closing element, configured so that a torus geometry is striven for as said inflatable tube segment is inflated and
- b. said closing element is a pipe nipple and said two ends of said tube segment are joined together fluid-tightly.
- 5. (Previously presented) The device according to claim 1, wherein said tube segment consists of a polyurethane, a polyurethane/polyvinyl chloride mixture, or a comparable polyurethane-based material or a polymer having comparable expansion and processing characteristics.
- 6. (Previously presented) The device according to claim 1, wherein said tube segment is configured for the reversible, sealing securement of the catheter at the end of the catheter shaft.
- 7. (Previously presented) The device according to claim 1, wherein said tube segment is formed by invaginating a single-walled tube section.
- 8. (Previously presented) The device according to claim 7, wherein at least one end of said tube section is attached to the catheter shaft.
- 9. (Previously presented) The device according to claim 1, wherein a channel for the delivery and/or discharge of a fluid opens into the interior space formed by said walls of said tube segment.
- 10. (Previously presented) The device according to claim 7, wherein said tube section or a portion thereof is preformed as a single-walled tube in the shape of a roll before being fashioned into a tube segment by invagination.
- 11. (Previously presented) The device according to claim 10, wherein a bulge produced vertically to the plane of rotation of said tube segment by the invagination is thickened by said preforming.
  - 12. (Canceled).
- 13. (Previously presented) The device according to claim 1, wherein said tube portion is provided with a uniform wall thickness and a uniform inner diameter.
- 14. (Previously presented) The device according to claim 1, wherein said tube segment is implemented with a residual volume.

- 15. (Previously presented) The device according to claim 1, wherein a channel is connected via a flexible connecting tube to a valve disposed outside said tube segment.
- 16. (Previously presented) The device according to claim 15, wherein said valve includes a valve lip.
- 17. (Previously presented) The device according to claim 15, wherein said valve is a circular sleeve consisting of flexible material and disposed between said tube ends.
- 18. (Previously presented) A device for tamponade of body cavities and for mechanical anchoring of a catheter, the device comprising:

a flexible tube segment having an inner wall and an outer wall that surround an interior space wherein said tube segment is inflatable to assume a torus geometry with said inner wall defining an internal area, and the internal area is configured without through-passing support bodies so that a displacement of tube wall material between said inner wall and said outer wall of said tube segment is possible as inflation proceeds, wherein said tube segment further comprises:

- a. two ends, which are fastened to a same closing element, configured so that a torus geometry is striven for as said inflatable tube segment is inflated and
- b. said closing element is a pipe nipple and said two ends of said tube segment are joined together fluid-tightly, wherein a clamping closure having a longitudinally displaceable sleeve is slidably attached to said tube segment.
- 19. (Previously presented) The device according to claim 1, wherein a collarshaped abutment is disposed on a selected one of said pipe nipple and said catheter shaft.
- 20. (Previously presented) The device according to claim 1, wherein a pressure sensor is contained in the interior space.
- 21. (Previously presented) The device according to claim 1, wherein a medically active substance can be introduced into the interior space enclosed by said tube segment.

- 22. (Previously presented) The device according to claim 21, wherein said medically active substance has at least one of radioactive and chemotherapeutic properties.
- 23. (Previously presented) The device according to claim 21, wherein said tube segment is covered in at least one subregion by a shield and said shield suppresses or decreases the medicinal activity of the substance in the shielded subregion.
- 24. (Previously presented) The device according to claim 1, wherein a radiographic contrast medium can be introduced into the interior space enclosed by said tube segment.
- 25. (Previously presented) The device according to claim 1, wherein affixed to a surface of said tube segment is a pair of electrodes.
- 26. (Previously presented) The device according to claim 1, wherein a receptacle is affixed to the surface of said tube segment.
  - 27. (Canceled).
  - 28. (Canceled).
- 29. (New) The device according to claim 1, wherein a carrier containing a chemotherapeutic substance is affixed to a surface of said tube segment.
- 30. (New) The device according to claim 1, wherein a carrier is affixed to a surface of said tube segment.
- 31. (New) The device according to claim 30, wherein the carrier contains a radioactive substance.